

CLAIM AMENDMENTS

1. (Currently Amended) A heat transport device comprising:
a container having a hollow structure ~~in which~~ including a fluid channel ~~is formed~~,
~~both opposite~~ ends of the fluid channel being closed to prevent intrusion of external air, and a
liquid and a gas ~~being~~ sealed in the fluid channel;
at least one ~~each~~ thermal-receiver-type heat exchanger and one thermal-radiator-type
heat exchanger ~~arranged~~ on an outer wall of the container along the fluid channel; and
driving heat exchangers ~~provided~~ provided at both respective terminal portions of the container
for causing the liquid to oscillate along the fluid channel.
2. (Currently Amended) The heat transport device according to claim 1, wherein at
least one of the terminal portions of the container where one of the driving heat exchangers
~~are provided~~ is located has, in cross-section, an internal corner ~~in cross-section~~.
3. (Currently Amended) The heat transport device according to claim 1, wherein the
terminal portions of the container have a larger cross-sectional area than ~~the other portion~~
portions of the container.
4. (Original) The heat transport device according to claim 1, wherein each of the
driving heat exchangers includes a heating unit and a cooling unit.
5. (Currently Amended) The heat transport device according to claim 1, wherein ~~the~~
~~internal volume of~~ each terminal portion of the container where one of the driving heat
~~exchanger~~ exchangers is provided is located has an internal volume at least equal to or larger
~~than the internal volume of that a portion of the container which is~~ bounded by the a center of
the thermal-receiver-type heat exchanger and ~~the a center of the thermal-radiator-type heat~~
exchanger.
6. (Currently Amended) The heat transport device according to claim 1, wherein the
liquid is a combination of ~~a low-boiling liquid and a high-boiling liquid which do not mix~~
~~with each other, and wherein~~ immiscible liquids having different boiling points, the ~~low-~~
~~boiling liquid~~ with a lower boiling point is sealed in one of the terminal portion portions of
the container, and the ~~high-boiling liquid~~ with the higher boiling point is sealed in ~~the other a~~
portion of the container different from the terminal portion containing the lower boiling point
liquid.
7. (Currently Amended) The heat transport device according to claim 1, wherein each

terminal portion of the container where one of the driving heat exchanger ~~exchangers~~ is ~~provided forms~~ located has a double pipe structure.

8. (Currently Amended) The heat transport device according to claim 1, ~~wherein~~ including a pore which produces a producing capillary action is provided located inside at least one of the terminal portions of the container where the driving heat exchangers are ~~provided~~ located.

9. (Currently Amended) The heat transport device according to claim 1, ~~wherein~~ including a recess serving as a nucleus for bubble formation is provided located in at least one of the terminal portions of the container where the driving heat exchangers are ~~provided~~ located.

10. (Currently Amended) The heat transport device according to claim 1, wherein the fluid channel ~~in which the liquid flows~~ is a meandering fluid channel.

11. (Currently Amended) The heat transport device according to claim 10, ~~wherein~~ including a single wall separating adjacent portions of the meandering fluid channel ~~are a~~ separated by a single wall.

12. (Currently Amended) The heat transport device according to claim 11, ~~wherein~~ including a bypass hole, which allows the liquid to pass through is formed, in the single wall between the adjacent portions of the meandering fluid channel.

13. (Currently Amended) The heat transport device according to claim 12, wherein at least one of the thermal-receiver-type heat exchanger and/or the thermal-radiator-type heat exchanger is provided located on a portion of ~~the~~ an outer wall of the container where the bypass hole is ~~provided~~ located.

14. (Currently Amended) The heat transport device according to claim 10, wherein the driving heat exchangers ~~are formed of~~ include a Peltier element, and ~~wherein~~ the terminal portions of the container are joined to each other via the Peltier element.

15. (Currently Amended) The heat transport device according to claim 1, wherein the container has a portion ~~formed of~~ including a flexible material.

16. (Currently Amended) The heat transport device according to claim 1, wherein the liquid is caused to oscillate in directions along the fluid channel by heating and cooling

~~operation of~~ by the driving heat exchangers, ~~said the~~ heat transport device further comprising a controller for controllably switching the driving heat exchangers between heating and cooling cycles based on temperatures of the driving heat exchangers detected by the controller.

17. (Currently Amended) The heat transport device according to claim 1 comprising multiple containers ~~provided~~ located adjacent to each other, wherein the driving heat exchangers are switched between heating and cooling cycles with different timings.

18. (Currently Amended) A semiconductor apparatus comprising:
a semiconductor device having a heat-generating portion; and
a heat transport device ~~which comprises~~ comprising:
a container having a hollow structure ~~in which a~~ including fluid channel ~~is formed, both~~ opposite ends of the fluid channel being closed to prevent intrusion of external air, and a liquid and a gas ~~being~~ sealed in the fluid channel;
at least one ~~each~~ thermal-receiver-type heat exchanger and one thermal-radiator-type heat exchanger ~~arranged~~ on an outer wall of the container along the fluid channel; and
driving heat exchangers ~~provided~~ at ~~both~~ respective terminal portions of the container for causing the liquid to oscillate along the fluid channel, wherein the thermal-receiver-type heat exchanger is located immediately adjacent to the heat-generating portion which generates heat when said semiconductor device is in operation.

19. (Currently Amended) An extra-atmospheric mobile unit comprising:
a heat-generating portion; and
a heat transport device ~~which comprises~~ comprising:
a container having a hollow structure ~~in which~~ including a fluid channel ~~is formed, both~~ opposite ends of the fluid channel being closed to prevent intrusion of external air, and a liquid and a gas ~~being~~ sealed in the fluid channel;
at least one ~~each~~ thermal-receiver-type heat exchanger and one thermal-radiator-type heat exchanger ~~arranged~~ on an outer wall of the container along the fluid channel; and
driving heat exchangers ~~provided~~ at ~~both~~ respective terminal portions of the container for causing the liquid to oscillate along the fluid channel, wherein the thermal-receiver-type heat exchanger is located immediately adjacent to the heat-generating portion which generates heat when ~~said the~~ extra-atmospheric mobile unit is in operation.